CLAIMS

- 1. A protein as set forth in (a) or (b) below:
- (a) a protein comprising an amino acid sequence according to Seq. No. 2, 4, 6 or 8, or
- (b) a protein comprising an amino acid sequence according to Seq. No. 2, 4, 6 or 8 with one or more amino acids deleted, replaced or added, and having adiponectin binding ability.
 - 2. A gene encoding the proteins according to Claim 1.
- 3. The gene according to Claim 2, comprising DNA as set forth in (c) or (d) below:
- (c) DNA comprising a base sequence according to Seq. No. 1, 3, 5 or 7;
- (d) DNA which hybridizes under stringent conditions with DNA complementary to DNA comprising a base sequences according to Seq. No. 1, 3, 5 or 7, and which encodes a protein having adiponectin binding ability.
- 4. A recombinant vector containing the gene according to Claim 2 or 3.
- 5. A transformant containing the recombinant vector according to Claim 4.
- 6. An antibody or fragment thereof capable of reacting with the protein according to Claim 1.

- 7. A screening method for a ligand, agonist or antagonist to an adiponectin receptor, comprising a step of bringing a test substance into contact with the protein according to Claim 1.
- 8. A screening kit for a ligand, agonist or antagonist to an adiponectin receptor, comprising the protein according to Claim 1, the DNA according to Claim 2 or 3, and the recombinant vector according to Claim 4 or the transformant according to Claim 5.